



PCT10

RAW SEQUENCE LISTING
PATENT APPLICATION: US/10/089,986

DATE: 04/25/2002
TIME: 11:51:22

Input Set : A:\EP.txt
Output Set: N:\CRF3\04252002\J089986.raw

3 <110> APPLICANT: KUROSAWA, Keiko
 4 KAIYAMA, Naoki
 5 <120> TITLE OF INVENTION: GENE ENCODING PROTEIN HAVING THE ABILITY TO REGENERATE
 LUCIFERIN, NOVEL
 6 RECOMBINANT DNA, PROCESS FOR THE PREPARATION OF PROTEIN HAVING THE ABILITY TO
 7 REGENERATE LUCIFERIN
 8 <130> FILE REFERENCE: 221609US0PCT
 C--> 12 <140> CURRENT APPLICATION NUMBER: US/10/089,986
 C--> 12 <141> CURRENT FILING DATE: 2002-04-08
 12 <150> PRIOR APPLICATION NUMBER: PCT/JP00/06527
 12 <151> PRIOR FILING DATE: 2000-09-22
 13 <150> PRIOR APPLICATION NUMBER: JP285258/1999
 15 <151> PRIOR FILING DATE: 1999-10-06
 16 <160> NUMBER OF SEQ ID NOS: 11
 18 <170> SOFTWARE: PatentIn version 3.1
 20 <210> SEQ ID NO: 1
 22 <211> LENGTH: 924
 24 <212> TYPE: DNA
 25 <213> ORGANISM: Photinus pyralis
 27 <220> FEATURE:
 28 <221> NAME/KEY: misc_feature
 29 <222> LOCATION: (843)...(843)
 30 <223> OTHER INFORMATION: n is a, g, t, or c
 33 <400> SEQUENCE: 1
 34 atggggccag ttgtgaaaa aattgcagaa cttggcaagt atacggtttg agaaggcct 60
 35 cactgggatc atgaaactca gaccttataat ttcgtcgaca ccgttagagaa aacttttcat 120
 36 aaatatgtac ctttcagaa aaaatacagc tttttaaaag tagataaaact gtttttttc 180
 37 attattcccc ttgtcgatc ccctggccgt tttgtgtca gtttggaaacg tgaaaatagcc 240
 38 attcttacat gggatggcgt tagtgctgca cctacaagca tagaagctat tgtaatgtc 300
 39 42 gaaccacaca ttaaaaataa cagactcaat gatggcaaag cagatcccct tggcaatcta 360
 43 44 tggacagta caatggctat tgacgcttgt ctcccccgtag gaccggtoac tggcagttt 420
 45 46 tatcatttag gggctgataa aaaggtaaaa atgcacgaga qcaacatagc tatagcaaat 480
 47 48 50 gggctcgct ggagtaatga tttgaagaaa atgtattata ttgattcggg gaaaagaaga 540
 51 52 qtagacgagt acgattatga tgcttctaca ttatccatca gcaatcaacg gccattattt 600
 53 54 55 aatttatggg ttgccgtttt ccaaggacag cgaattatta aaatcagtagc ccaacaaccg 660
 56 57 58 60 ggtccgaatt tggataccgt aaaatacca gatcctcagg tcacctctgt agcatttggc 720
 61 62 ttngacaaaa gtttagttaa tgggcacgtc tacagagtaa caggtttagg cgtcaaagg 780
 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100 101 102 103 104 105 106 107 108 109 110 111 112 113 114 115 116 117 118 119 120 121 122 123 124 125 126 127 128 129 130 131 132 133 134 135 136 137 138 139 140 141 142 143 144 145 146 147 148 149 150 151 152 153 154 155 156 157 158 159 160 161 162 163 164 165 166 167 168 169 170 171 172 173 174 175 176 177 178 179 180 181 182 183 184 185 186 187 188 189 190 191 192 193 194 195 196 197 198 199 200 201 202 203 204 205 206 207 208 209 210 211 212 213 214 215 216 217 218 219 220 221 222 223 224 225 226 227 228 229 230 231 232 233 234 235 236 237 238 239 240 241 242 243 244 245 246 247 248 249 250 251 252 253 254 255 256 257 258 259 259 260 261 262 263 264 265 266 267 268 269 270 271 272 273 274 275 276 277 278 279 279 280 281 282 283 284 285 286 287 288 289 289 290 291 292 293 294 295 296 297 298 299 299 300 301 302 303 304 305 306 307 308 309 310 311 312 313 314 315 316 317 318 319 319 320 321 322 323 324 325 326 327 328 329 329 330 331 332 333 334 335 336 337 338 339 339 340 341 342 343 344 345 346 347 348 349 349 350 351 352 353 354 355 356 357 358 359 359 360 361 362 363 364 365 366 367 368 369 369 370 371 372 373 374 375 376 377 378 379 379 380 381 382 383 384 385 386 387 388 389 389 390 391 392 393 394 395 396 397 398 399 399 400 401 402 403 404 405 406 407 408 409 409 410 411 412 413 414 415 416 417 418 419 419 420 421 422 423 424 425 426 427 428 429 429 430 431 432 433 434 435 436 437 438 439 439 440 441 442 443 444 445 446 447 448 449 449 450 451 452 453 454 455 456 457 458 459 459 460 461 462 463 464 465 466 467 468 469 469 470 471 472 473 474 475 476 477 478 479 479 480 481 482 483 484 485 486 487 488 489 489 490 491 492 493 494 495 496 497 498 498 499 499 500 501 502 503 504 505 506 507 508 509 509 510 511 512 513 514 515 516 517 518 519 519 520 521 522 523 524 525 526 527 528 529 529 530 531 532 533 534 535 536 537 538 539 539 540 541 542 543 544 545 546 547 548 549 549 550 551 552 553 554 555 556 557 558 559 559 560 561 562 563 564 565 566 567 568 569 569 570 571 572 573 574 575 576 577 578 579 579 580 581 582 583 584 585 586 587 588 589 589 589 590 591 592 593 594 595 596 597 598 598 599 599 600 601 602 603 604 605 606 607 608 609 609 610 611 612 613 614 615 616 617 618 619 619 620 621 622 623 624 625 626 627 628 629 629 630 631 632 633 634 635 636 637 638 639 639 640 641 642 643 644 645 646 647 648 649 649 650 651 652 653 654 655 656 657 658 659 659 660 661 662 663 664 665 666 667 668 669 669 670 671 672 673 674 675 676 677 678 679 679 680 681 682 683 684 685 686 687 688 689 689 689 690 691 692 693 694 695 696 697 698 698 699 699 700 701 702 703 704 705 706 707 708 709 709 710 711 712 713 714 715 716 717 718 719 719 720 721 722 723 724 725 726 727 728 729 729 729 730 731 732 733 734 735 736 737 738 739 739 739 740 741 742 743 744 745 746 747 748 749 749 749 750 751 752 753 754 755 756 757 758 759 759 759 760 761 762 763 764 765 766 767 768 769 769 769 770 771 772 773 774 775 776 777 778 779 779 779 780 781 782 783 784 785 786 787 788 789 789 789 790 791 792 793 794 795 796 797 798 798 798 799 799 799 799 800 801 802 803 804 805 806 807 808 809 809 809 810 811 812 813 814 815 816 817 818 819 819 819 820 821 822 823 824 825 826 827 828 829 829 829 830 831 832 833 834 835 836 837 838 839 839 839 840 841 842 843 844 845 846 847 848 849 849 849 850 851 852 853 854 855 856 857 858 859 859 859 860 861 862 863 864 865 866 867 868 869 869 869 870 871 872 873 874 875 876 877 878 879 879 879 880 881 882 883 884 885 886 887 888 889 889 889 889 890 891 892 893 894 895 896 897 898 898 898 899 899 899 899 900 901 902 903 904 905 906 907 908 909 909 909 910 911 912 913 914 915 916 917 918 919 919 919 920 921 922 923 924

RAW SEQUENCE LISTING

DATE: 04/25/2002
TIME: 11:51:22

Input Set : A:\EP.txt
Output Set: N:\CRF3\04252002\J089986.raw

72 <400> SEQUENCE: 2
 74 Met Gly Pro Val Val Glu Lys Ile Ala Glu Leu Gly Lys Tyr Thr Val
 75 1 5 10 15
 76 Gly Glu Gly Pro His Trp Asp His Glu Thr Gln Thr Leu Tyr Phe Val
 77 20 25 30
 78 Asp Thr Val Glu Lys Thr Phe His Lys Tyr Val Pro Ser Gln Lys Lys
 79 35 40 45
 80 50 55 60
 81 Tyr Thr Phe Cys Lys Val Asp Lys Leu Val Ser Phe Ile Ile Pro Leu
 82 65 70 75 80
 83 85 90 95
 84 Ala Gly Ser Pro Gly Arg Phe Val Val Ser Leu Glu Arg Glu Ile Ala
 85 95 100 105 110
 86 Ile Leu Thr Trp Asp Gly Val Ser Ala Ala Pro Thr Ser Ile Glu Ala
 87 105 110 115 120 125
 88 Ile Val Asn Val Glu Pro His Ile Lys Asn Asn Arg Leu Asn Asp Gly
 89 125 130 135 140 145
 90 140 145 150 155 160
 91 150 155 160 165 170 175
 92 165 170 175 180 185 190
 93 180 185 190 195 200 205
 94 195 200 205 210 215 220
 95 210 215 220 225 230 235 240
 96 225 230 235 240 245 250 255
 97 240 245 250 255 260 265 270
 98 255 260 265 270 275 280 285
 99 275 280 285 290 295 300
 100 Lys Val Lys Leu
 101 305
 102 <210> SEQ ID NO: 3
 103 <211> LENGTH: 24
 104 <212> TYPE: DNA
 105 <213> ORGANISM: Artificial Sequence
 106 <220> FEATURE:
 107 <223> OTHER INFORMATION: synthetic DNA
 108 <400> SEQUENCE: 3
 109 qttqqaqaag gaccgatttg ggat

24

RAW SEQUENCE LISTING
PATENT APPLICATION: US/10/089,986

DATE: 04/25/2002
TIME: 11:51:22

Input Set : A:\EP.txt
Output Set: N:\CRF3\04252002\J089986.raw

```

166 <210> SEQ ID NO: 4
167 <211> LENGTH: 29
168 <212> TYPE: DNA
169 <213> ORGANISM: Artificial Sequence
171 <220> FEATURE:
172 <223> OTHER INFORMATION: synthetic DNA
174 <400> SEQUENCE: 4                                29
175 tcatccaaat tggggccgccc aaacgcgac
178 <210> SEQ ID NO: 5
179 <211> LENGTH: 20
180 <212> TYPE: DNA
181 <213> ORGANISM: Artificial Sequence
183 <220> FEATURE:
184 <223> OTHER INFORMATION: synthetic DNA
186 <400> SEQUENCE: 5                                20
187 gqacaggtac aatggctatt
190 <210> SEQ ID NO: 6
191 <211> LENGTH: 20
192 <212> TYPE: DNA
193 <213> ORGANISM: Artificial Sequence
195 <220> FEATURE:
196 <223> OTHER INFORMATION: synthetic DNA
198 <400> SEQUENCE: 6                                20
199 atcgtaactcg tctactcttc
202 <210> SEQ ID NO: 7
203 <211> LENGTH: 22
204 <212> TYPE: DNA
205 <213> ORGANISM: Artificial Sequence
207 <220> FEATURE:
208 <223> OTHER INFORMATION: synthetic DNA
210 <400> SEQUENCE: 7                                22
211 taggtgcagc actaacgccta tc
214 <210> SEQ ID NO: 8
215 <211> LENGTH: 21
216 <212> TYPE: DNA
217 <213> ORGANISM: Artificial Sequence
219 <220> FEATURE:
220 <223> OTHER INFORMATION: synthetic DNA
222 <400> SEQUENCE: 8                                21
223 ttcacgttcc aaactgacta c
226 <210> SEQ ID NO: 9
227 <211> LENGTH: 23
228 <212> TYPE: DNA
229 <213> ORGANISM: Artificial Sequence
231 <220> FEATURE:
232 <223> OTHER INFORMATION: synthetic DNA
234 <400> SEQUENCE: 9                                23
235 ctcgcgtgga gtaatgattt gaa
238 <210> SEQ ID NO: 10

```

RAW SEQUENCE LISTING
PATENT APPLICATION: US/10/089,986

DATE: 04/25/2002
TIME: 11:51:22

Input Set : A:\EP.txt
Output Set: N:\CRF3\04252002\J089986.raw

239 <211> LENGTH: 33
240 <212> TYPE: DNA
241 <213> ORGANISM: Artificial Sequence
243 <220> FEATURE:
244 <223> OTHER INFORMATION: synthetic DNA
246 <400> SEQUENCE: 10 33
247 ggaattcatg gggccagttg ttgaaaaat tgc
250 <210> SEQ ID NO: 11
251 <211> LENGTH: 35
252 <212> TYPE: DNA
253 <213> ORGANISM: Artificial Sequence
255 <220> FEATURE:
256 <223> OTHER INFORMATION: synthetic DNA
258 <400> SEQUENCE: 11 35
259 aactgcagtc atagcttac ttaactccc gcgaa

RAW SEQUENCE LISTING ERROR SUMMARY
PATENT APPLICATION: US/10/089,986

DATE: 04/25/2002
TIME: 11:51:23

Input Set : A:\EP.txt
Output Set: N:\CRF3\04252002\J089986.raw

Please Note:
Use of n and/or Xaa have been detected in the Sequence Listing. Please review the
Sequence Listing to ensure that a corresponding explanation is presented in the <220>
to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:1; N Pos. 843

VERIFICATION SUMMARY
PATENT APPLICATION: US/10/089,986

DATE: 04/25/2002
TIME: 11:51:23

Input Set : A:\EP.txt
Output Set: N:\CRF3\04252002\J089986.raw

L:12 M:270 C: Current Application Number differs, Replaced Current Application No
L:12 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:62 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1 after pos.:840